5658

SITE CHARACTERIZATION REPORT

on

Winlock School Bus Garage

311 NW 1st Street
Winlock, WA 98586

for

Winlock School District, Larry Hearst, Supt.
Dept. of Ecology, Patty Martin
Lewis County Environmental Health, Steve Garrett
Front Royal Insurance, Joe Glassman

Prepared by

Site Assessor:

Cathy Frey, Industrial Safety and Training, Inc.

May 14, 1995

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INDEX

Industrial Safety & Training, Inc.

202 NE Lybarger
Olympia, WA 98506
Tel (360) 357-3566
Fax (360) 740-0818

May 14, 1995

Site: Winlock School Bus Garage
King Road & Dexter Ave.
Winlock, WA 98596

DOE Site #: 100997

HISTORY/BACKGROUND:

The subject site had (2) registered 1,000 gal. UST's, both approximately 11 years old. One tank consisted of diesel and one tank consisted of unleaded gasoline. A third tank, unregistered, approximately 34 years old with a 1,000 gallon capacity was permanently abandoned approximately 20 years ago. The tank had consisted of leaded gasoline before it was taken out of service.

On March 13, 1995, a bus driver noticed water in the filter located on the side of the gasoline pump. After sticking the gasoline tank, it was determined that approximately 200 gallons of fuel had leaked into the ground. The school district immediately had the gasoline tank pumped free of all existing product.

On March 14, 1995, a manual tank gauging stick was again used to monitor the tank. The stick detected that the tank had filled up with approximately 500 gallons of water. At that point, arrangements were made to immediately decommission both the gasoline and diesel UST's.

On March 15, 1995, North Fork Construction, located at 103 N. Fork Road, Chehalis, WA, (360) 262-9825, proceeded to remove both UST's. They decided to remove the unregistered abandoned tank as well.

UST SYSTEM DATA:

The tanks were tightness tested on September 26, 1994, by Ed's Service and Maintenance located at 7541 Lundeen Road SW, Rochester, WA, 98579 and both passed. All UST's were single wall steel and the piping was also steel. The UST System was Suction. The two fuel dispensers were also removed.

Spencer, Inc., located in Oregon City, Oregon, pumped out and triple rinsed the tanks. The leaky gasoline tank product and rinsate was transferred into Drums on site. Spencer also pumped out the water from the pits and transferred it into Drums on site.

The UST's and associated piping were delivered to J&J Salvage Wrecking, located at 912 73rd Ave. SE, Olympia, WA. (This consultant was unsuccessful in several attempts to collect receipts for this report. Please contact North Fork Construction for copies of any receipts of interest).

SITE OBSERVATIONS:

It was quite apparent from the beginning of the excavation process that PCS (Petroleum Contaminated Soils) and water were present by visual and olfactory observation. The top of the water table was encountered at a depth of approximately 3'4" prior to the removal of the tanks.

The first tank removed (diesel) was in very good condition, and the second tank (leaky gasoline) removed showed evidence of a puncture/hole located in the bottom north end of the tank. The abandoned tank appeared to be in good condition upon removal.

Winlock School District hired Industrial Safety & Training, located at 202 NE Lybarger, Olympia, WA, to conduct the Site Assessment upon decommissioning of the tanks. Due to the evidence of contamination, The Department of Ecology (DOE) and Winlock School District were notified and appropriate paperwork was sent to the Underground Storage Tank Section of DOE. At this point in time, a Site Characterization was initiated.

A total of three (3) soil samples were collected at the approximate top of the water table and two (2) water samples were collected to confirm contamination and determine an average contaminant concentration. Soil sample # GS1 was analyzed for Gasoline by WTPH-G and BTEX by EPA Method 8020 and the results were above MTCA Method A cleanup standards for both Gasoline and Benzene. Soil sample # DS2 was analyzed for Diesel by WTPH-D and the results were non-detect. Sample #3 was analyzed for Hydrocarbon Identification by WTPH-HCID and for total lead. The result for HCID was gasoline and the lead was well below cleanup standards. Two "re-charged" water samples were collected from the pits. Both water sample results were well above MTCA Method A cleanup standards. (Results for all analyses in this report are summarized in attached tables for your convenience).

HYDROGEOLOGICAL AND SOIL CHARACTERISTICS:

The soil make up of the subject site does not resemble the typical soil characterization described in the Soil Survey of the Lewis County Area. The area in which this project lies used to be a Mill pond and the soils on site consist of a mixture of various backfill materials including sands, gravels, pea gravel, crushed rock, silts, clays) . It was not possible to determine where the backfill ended and the native soils began.

The area has an extremely high seasonal perched water table. The following is a brief description of the Aquifer supplying Winlock municipal wells:

According to information from: Geology and Ground water Resources of West-Central Lewis County, Water Supply Bulletin #17 1962 by the US. Geological Survey, the Winlock well series, depending on location and depth will draw water from either local flood plain deposits of recent occurrence or glaciofluvial deposits of poorly sorted gravel and sand with minor amounts of Silt as is typical of the Jackson Prairie. The depth to ground water in this area is reported to be approximately 7' to 9' in the summer and 1' to 3' in the winter. The directional flow of the ground water appears to flow southeasterly. The nearest body of water is Olequa Creek, which is located approximately 57 feet east from the excavated clean sidewalls. Olequa is a losing stream flowing southerly into the Cowlitz River

LAND USE DATA:

Surrounding land use is zoned as R1-CS (Residential Single Family-Community Service). The entire drive and parking lot consists of an approximate 18 inch gravel cover. Historical and current practices during the summer months include the County spreading oil on this ground cover to help keep the dust settled.

There is an active Mill across Olequa Creek (east) which produces Veneer. Property surrounding the Bus Garage is owned by Spalding Enterprises. (712 NW Dexter) The property consists of a rental shop specializing in Backhoes, Dumptrucks, and Dozers.

The Bus Garage sits on what used to be "Third Street". (See attached County Assessor Map for clarification).

The City of Winlock has since reconstructed what used to be Third Street. The land was elevated and a new road named Dexter was designed and built behind the Bus Garage (West).

Water runoff is supposed to flow northerly down Dexter at a slope of approximately 4 % into the collection storm drain located on the east side of Dexter Street. There is also a drainage ditch approximately 24 feet wide which is also supposed to catch surface water runoff and then flow through a culvert into Olequa Creek. However, the stormwater runoff actually flows into the subject site and the property owned by Spalding Enterprises before it reaches the collection stormwater drain because the curbing the City of Winlock built along Dexter Street does not extend far enough for the runoff to reach the storm drain. According to Spalding Enterprises, this issue of stormwater runoff has been addressed to the Mayor of Winlock and the situation still needs to be resolved.

There is one (1) active, registered UST system within a half mile radius:

Handi Store/Chevron DOE Site # 097626
503 Kerron Street
Winlock, WA 98596

Tank #1	Age: 12 years	Gal. x 1000: 10-20, leaded
Tank #2	Age: 8 years	Gal. x 1000: 5-10, unleaded
Tank #3	Age: 8 years	Gal. x 1000: 5-10, unleaded

DISCUSSION:

INDUSTRIAL crew was on site April 4, 1995 through May 8, 1995 and activities conducted during this time were as follows:

A temporary trench was dug 10 feet deep and approximately 25 feet long along the back of the bus garage in order to lower the water table prior to excavating the PCS. The ground water was treated using the activated carbon adsorption method. Once the system was hooked up, a treated water sample was collected (sample # FW1) to be analyzed and the system was shut down while awaiting analytical results. The sample was above acceptable cleanup standards and we called the distributors at that time. On April 5, 1995, a new system was delivered and set up. Another water sample was collected (FW2) and the results were non-detect. The treated water was

discharged into Olequa Creek. A permit was not required by DOE as the water treatment is considered a Short Term (treated effluent discharge of 60 days or less) class of water discharge.

INDUSTRIAL proceeded to excavate the PCS. The ground was lined with 10 mil. visqueen and a protective layer of approximately 6 inches of clean soil was placed on top of the visqueen to handle loading of the PCS and the equipment used to place the soil. A berm of straw bales was constructed around the soils to prevent possible runoff. Contingency plans were put into place to cover the soil in the event it should rain.

INDUSTRIAL continued to excavate both vertically and horizontally. The PCS's were treated on site using a combination of bioremediation and aeration. "Land farming" was accomplished by spreading the soil approximately 6" to 1' 6". Applications of nutrients and constant tilling was used to accomplish the PCS treatment process. SWAPCA was notified prior to treating the PCS's using this process, and evidently there are no permits required to land farm in Lewis County at this time.

Approximately two thousand cubic yards of PCS was spread out over an area approximately 175 X 200 feet and was in the process of treatment. At this point most of the contaminated soil had been removed, and only two areas still contained PCS. One area is located in the southwestern corner underneath the bus garage. At this time it is not feasible to excavate this material without tremendous cost or destruction of the building. The second area is located southeast and extends toward King Street. Both areas appeared to consist of gasoline type origin which appeared to be possibly weathered and old. The contaminated soil in these areas could possibly be associated with the old abandoned tank.

A test pit was dug approximately 10 feet further south toward King Street in an attempt to estimate how much PCS might still be in the ground. Field testing showed this area to be clean.

However, these are unusual circumstances in that we were only allowed to take action to cleanup contamination associated with the leaky gasoline tank covered under Front Royal insurance. We estimate there is approximately 740 cyds. of PCS in place under the bus garage. The volume of contaminated soil was calculated using the following assumptions: 1. The thickness of the contaminated zone is 10 feet. 2. The width was estimated at 40 feet. 3. The length was estimated at 50 feet. However, there could be significantly less PCS under the building; but at this point it is impossible to know for sure where the plume ends without further investigation. We also estimate there is still approximately 111 cyds. of PCS to be removed south toward King Street. The volume of contaminated soil was calculated using the following assumptions: 1. The thickness of the contaminated zone is 10 feet. 2. The width was estimated at 10 feet. 3. The length was estimated at 30 feet.

Fortunately, the contamination does not appear to travel downward into the soil below a depth of 11 feet. The natural silty clay formation at the base of the pit has decreased the amount of permeability for the gasoline to penetrate deeply.

On April 8, 1995, Transglobal Environmental Geosciences (TEG) arrived on site with a mobile lab to begin "on site" analytical testing. A total of 12 soil samples and 2 "re-charged" water samples were collected from the excavation to verify that the PCS had indeed been penetrated and removed. (See the sample diagram enclosed for exact locations and depths). We believe that enough samples were collected throughout the excavation to completely characterize the condition of the excavation.

Samples were collected using an auger and hand tools. All soil samples were collected from at least 6" into the sidewalls and base to ensure collection from unexposed areas and to minimize the loss of volatile contaminants. All soil sample results were non-detect or well below MTCA Method A cleanup standards except for E4, E5, and E12. These samples are located next to the

foundation of the bus garage and the sidewall extending south toward King Street as previously mentioned. It should also be noted that sample E12 was discussed with the lab technician on site and he mentioned that traces of "older diesel" was also detected in the sample. This could possibly confirm that this particular area of contaminated soil was indeed not associated with the current leak from the insured gasoline tank. It is possible that historical waste handing practices or human error caused some kind of spill in the past. All samples were tested for WTPH-G with BTEX using Method 8020.

The "recharged" water sample # R2 results were above acceptable cleanup standards. Further field testing was conducted at the base of the pit where the water sample was collected and a small hot spot was discovered. An additional back hoe bucket full of soil was removed and once the water had time to re-enter the pit, sample #R2B was collected. The results were non-detect. All samples collected without the on site laboratory were placed into laboratory provided pre-cleaned glass jars capped with Teflon lined lids. All samples were immediately placed into a cooler containing frozen jell packs. Samples jars were labeled and a chain of custody was completed before leaving the site.

On May 8, 1995 , final samples of the remediated soil were collected to verify all PCS had been remediated to meet MTCA Method A cleanup standards. A total of ten soil samples were collected from soil that was still "spread out". (A sampling diagram is provided for your convenience.) All ten soil samples were tested for WTPH-G with BTEX using EPA Method 8020. All ten sample analyses for WTPH-G with BTEX were either non-detect or below MTCA Method A cleanup standards.

The remediated soil will remain on site for now and Spalding Enterprises will use it for future commercial or industrial fill.

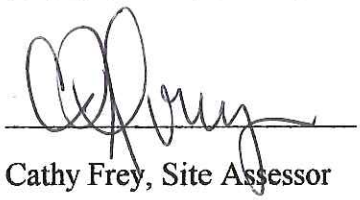
All sampling was conducted using the focused approach as there were plenty of reliable indicators which made it possible to identify areas of soil contamination.

CONCLUSION AND RECOMMENDATIONS:

On the basis of careful visual and olfactory inspection of the excavation, field screening, and all laboratory results on the soil samples collected, it is the conclusion of these consultants that virtually all contaminated soil associated with the gasoline leak has been penetrated and removed. (except for the isolated area under the building)

Under The Model Toxics Control Act Cleanup Regulation Chapter 173-340-(3) (iii) "If contaminated soil is found in contact with the ground water or soil contamination appears to extend below the lowest sampling depth, then testing shall include the installation of ground water monitoring wells to test for the presense of possible ground water contamination." Installation of ground water monitoring wells must be done by a licensed well driller. Final ground water sampling is needed to ensure that groundwater cleanup standards have been met.

We trust that the information presented in this report will satisfy your current requirements, and we appreciate the opportunity to provide our Services for this project. If you have any questions or would like additional information, feel free to call anytime.

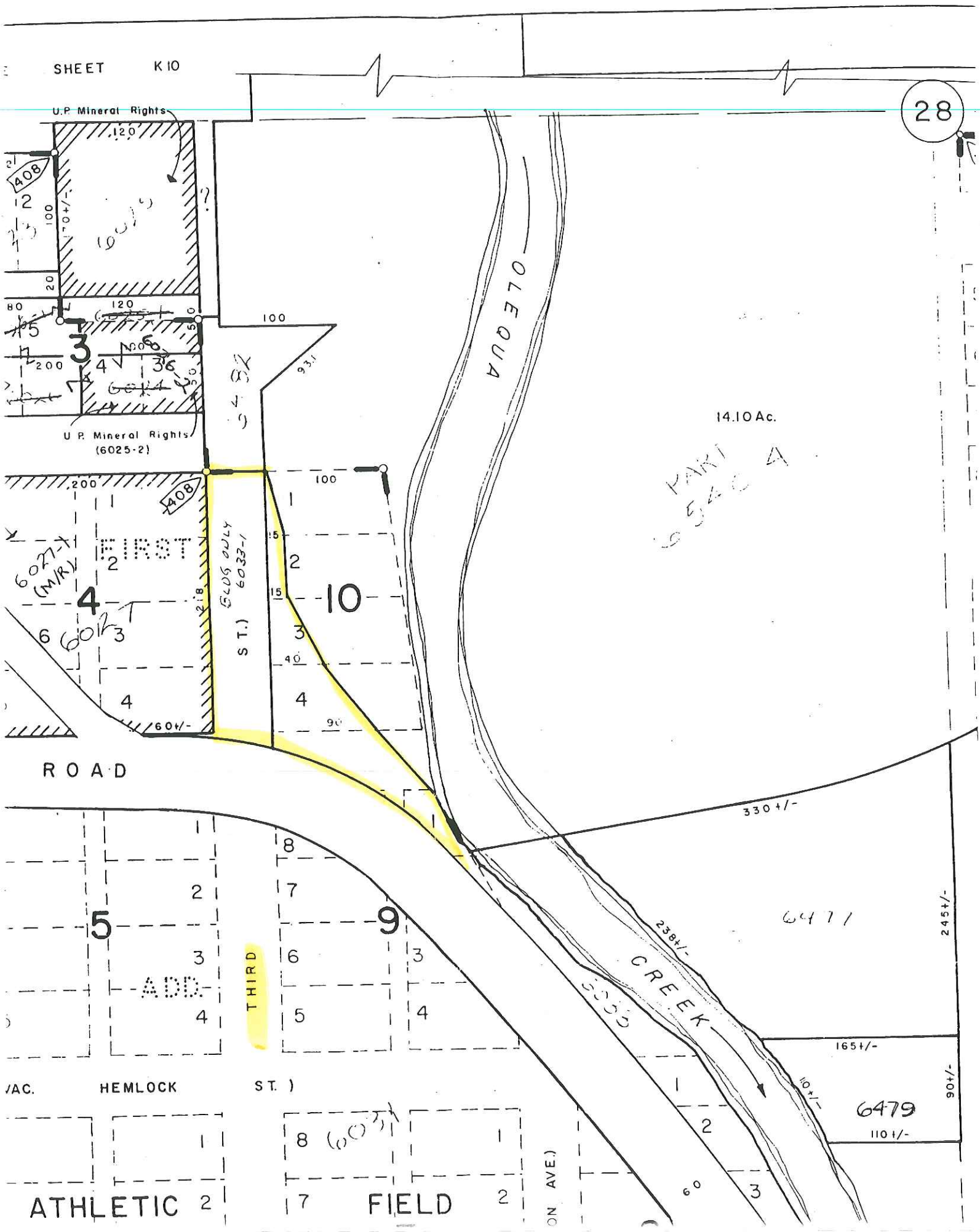


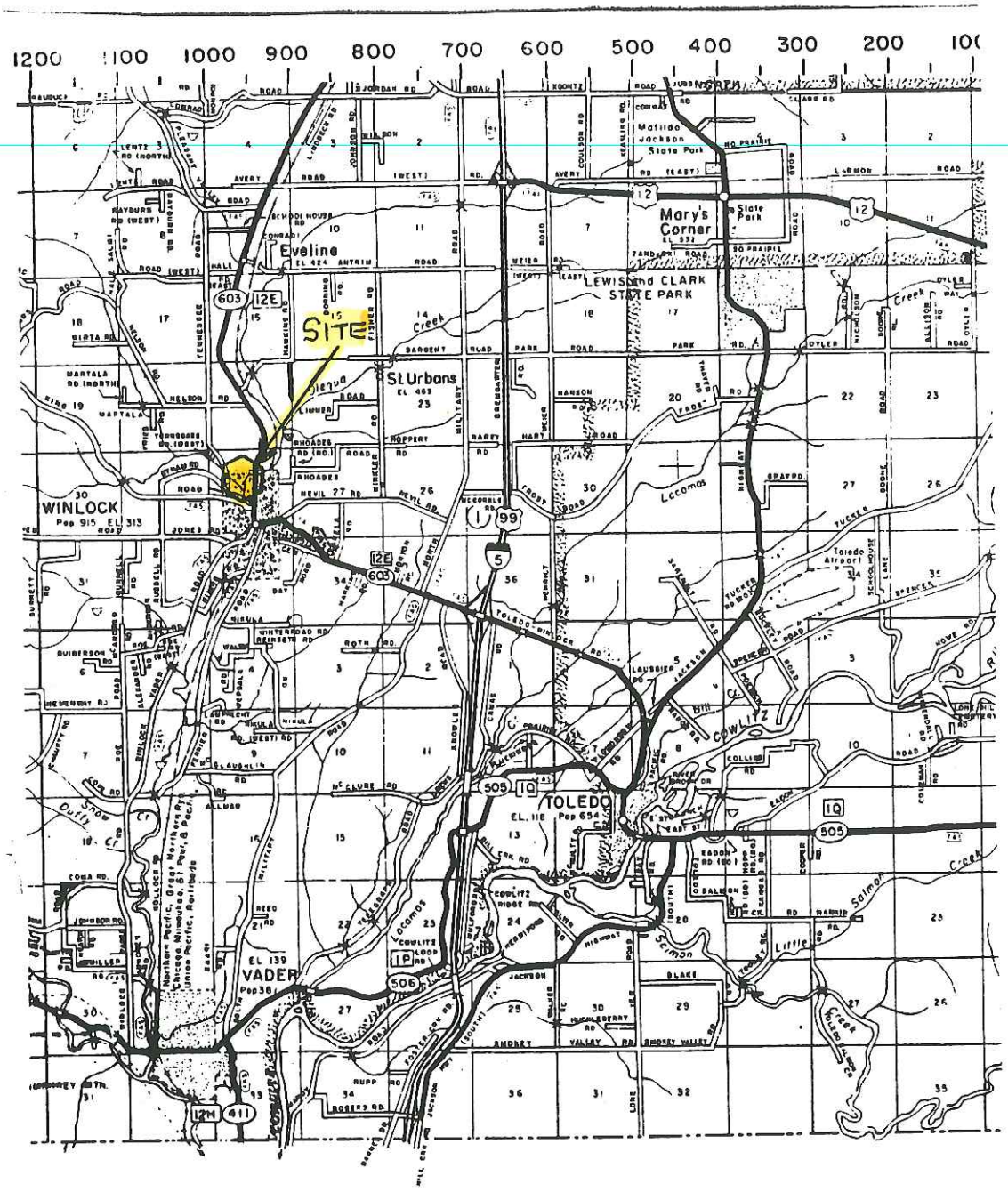
Cathy Frey, Site Assessor

Industrial Safety and Training, Inc.

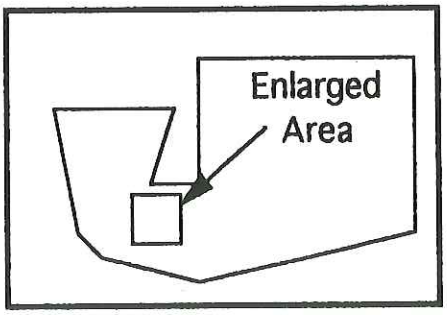
APPENDIX A

County Assessors Plat Map
Vicinity Map


SHEET K10
28
U.P. Mineral Rights
120
408
100
70+/-
20
80
120
100
200
3
4
36
U.P. Mineral Rights
(6025-2)
200
408
100
1
15
2
10
3
40
4
90
FIRST
2
4
6027-1
(M/R)
6027-1
6
218
GLOS ADLY
6033-1
ST.)
60+/-
ROAD
OLEQUA
14.10 Ac.
PARK
6544
330+/-
6477
245+/-
238+/-
CREEK
5555
165+/-
110+/-
90+/-
6479
110+/-
5
2
3
4
ADD.
9
8
7
6
5
3
4
THIRD
VAC.
HEMLOCK
ST.)
8
(60')
1
2
7
2
ATHLETIC
FIELD
ON AVE.)
60
3



VICINITY MAP
WINLOCK AREA



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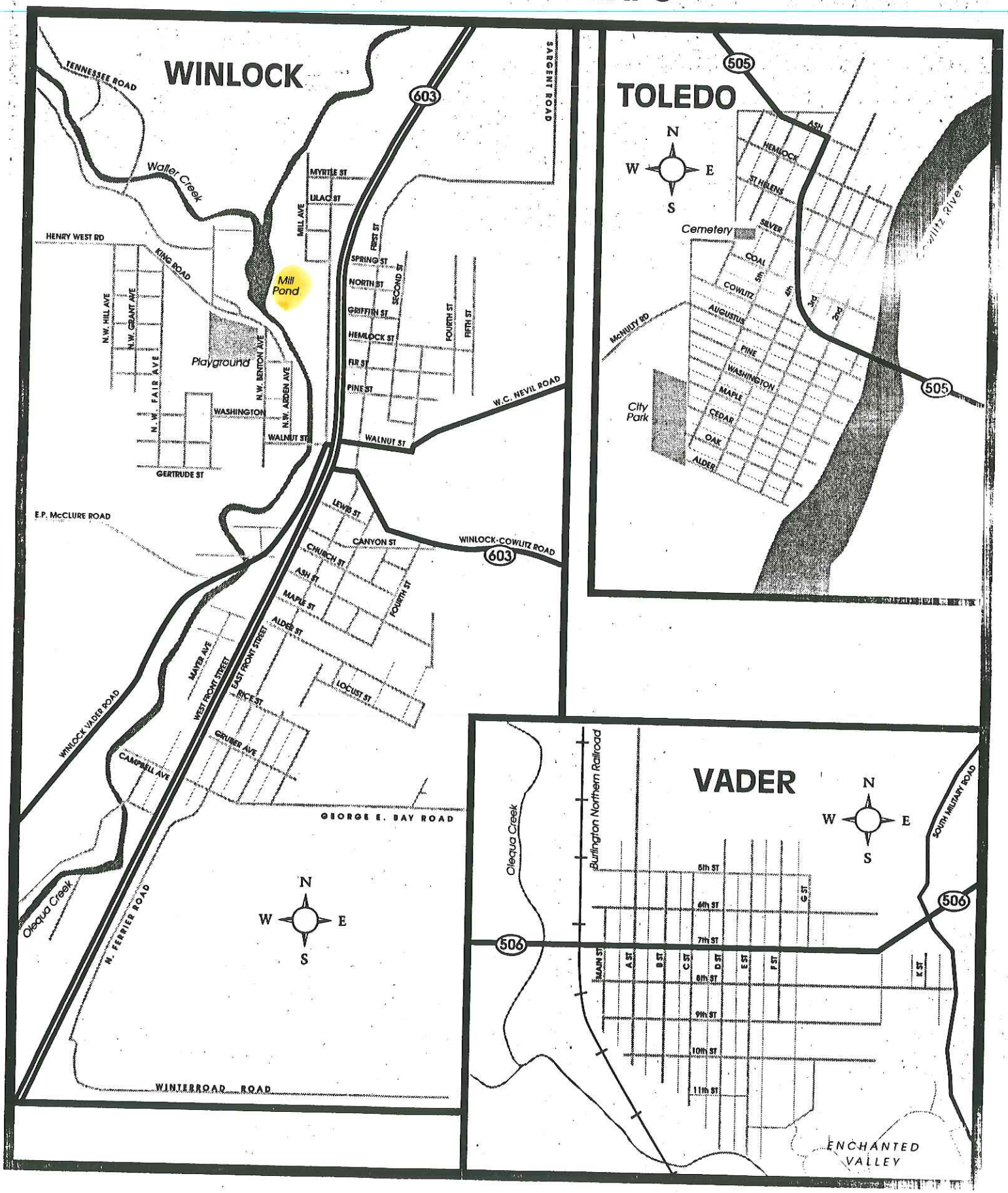
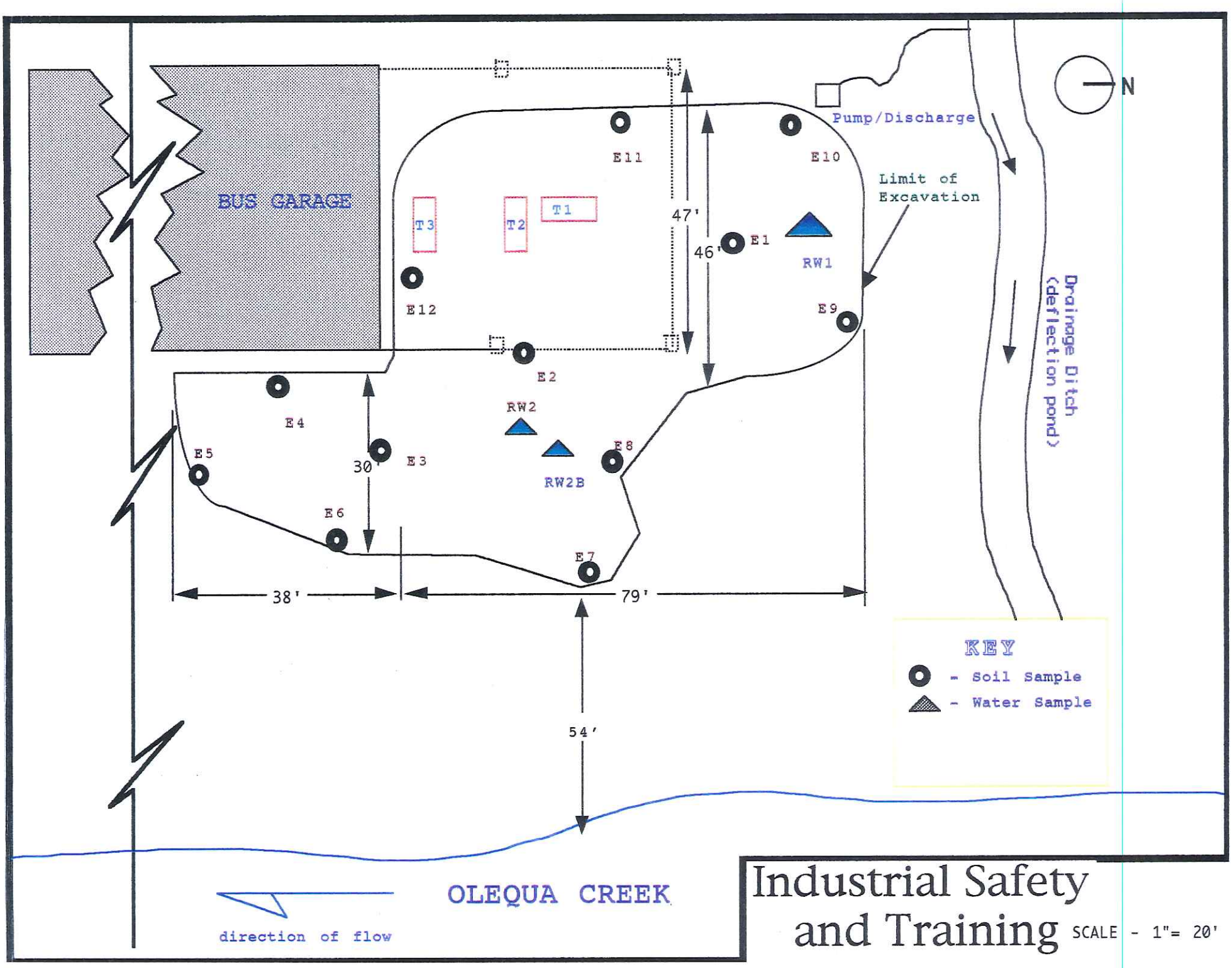
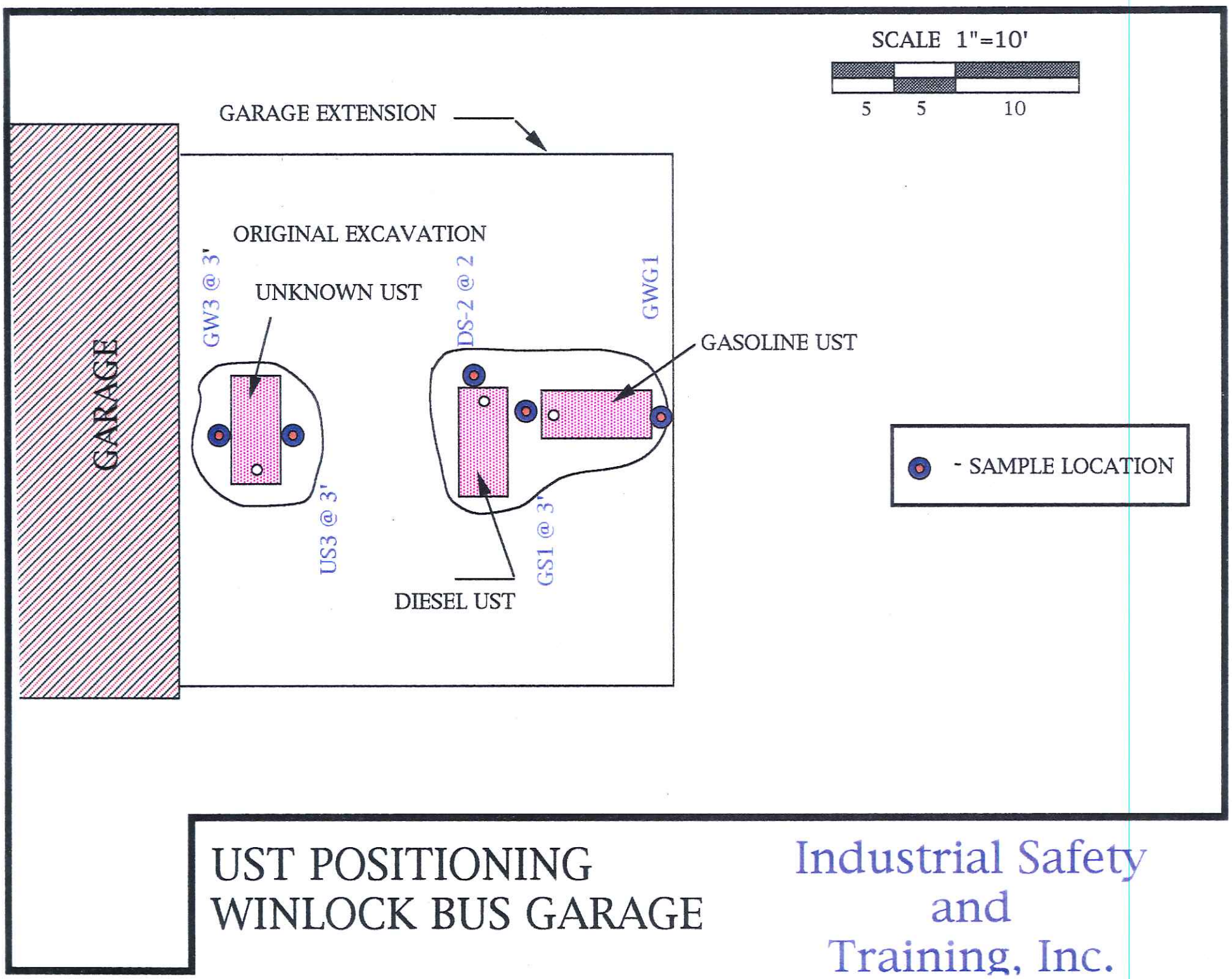
WINLOCK-TOLEDO-VADER
COMMUNITY MAPS



APPENDIX B

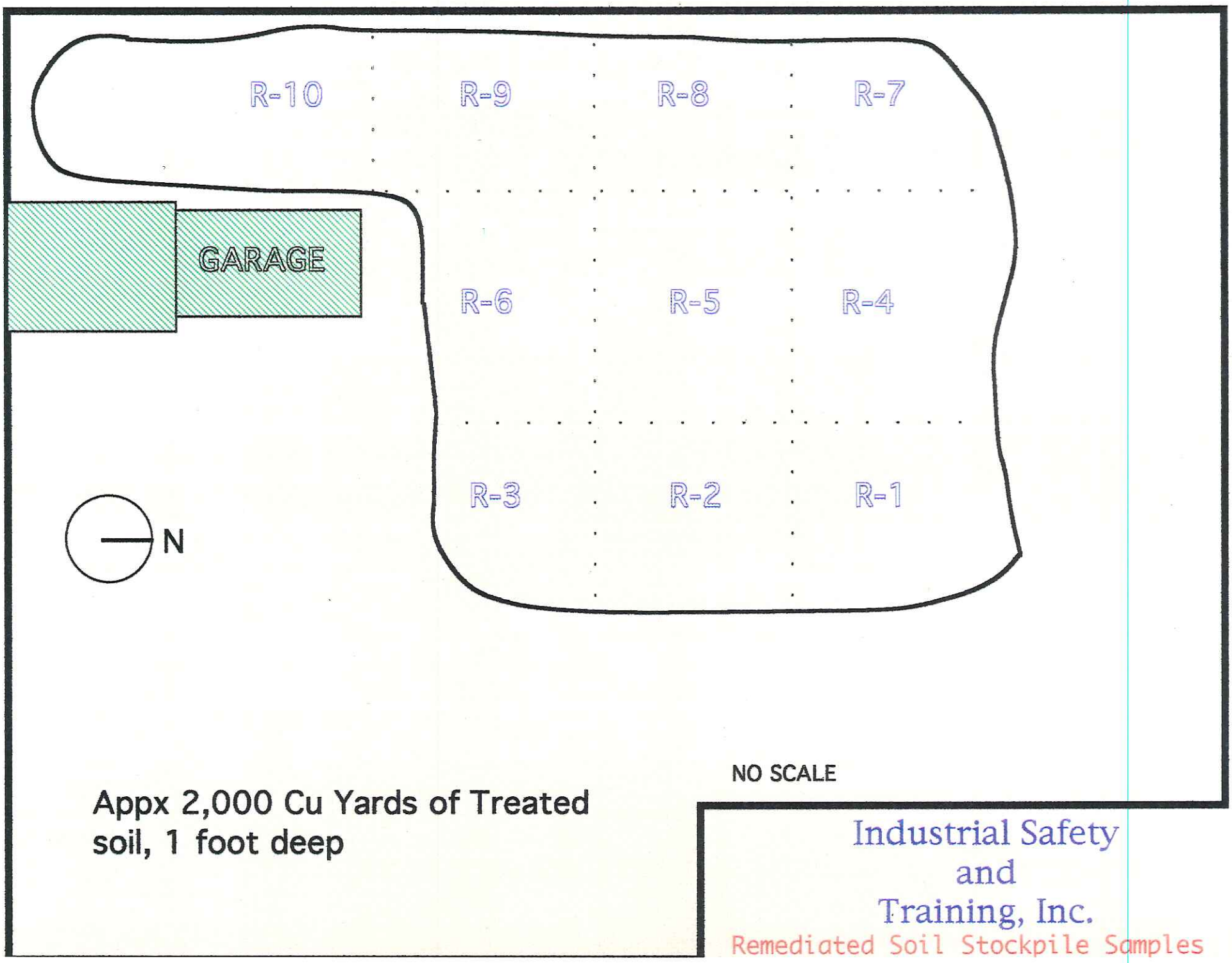
Sampling Diagrams with Tables


BUS GARAGE
E11
E10
Pump/Discharge
N
Limit of
Excavation
T3
T2
T1
47'
46'
E1
RW1
E12
E9
Drainage Ditch
(deflection pond)
E2
E4
RW2
E5
30'
E3
E8
RW2B
E6
E7
38'
79'
54'
KEY
- Soil Sample
- Water Sample
OLEQUA CREEK
direction of flow
Industrial Safety
and Training
SCALE - 1"= 20'



UST POSITIONING
WINLOCK BUS GARAGE

Industrial Safety
and
Training, Inc.



NO SCALE

Appx 2,000 Cu Yards of Treated soil, 1 foot deep

Industrial Safety and Training, Inc.

Remediated Soil Stockpile Samples

Winlock School District #232, Bus Garage

RESULTS OF FIELD SCREENING AND CHEMICAL ANALYSIS SAMPLING OF SOILS

Sample ID #	Sample Location	Sample Depth	Date Analyzed	Field Screening results		EPA 8020					
				Headspace vapors (ppm)	Sheen	WTPH-G (mg/kg)	WTPH-D mg/kg)	B	T	E	X
GS -1	SEE DIAGRAM	3	3/16/95			116	-	2.45	9.81	2.14	12.9
DS-2		3	3/16/95			nd	nd	-	-	-	-
US-3		3	3/16/95			d	nd	-	-	-	-
GWG-1		water	3/16/95			*39500	-	3260	7830	790	4480
GWU-3		water	3/16/95			*78200	-	15100	21800	1180	6950
E1		11	4/8/95			nd	-	.47	2.14	--	4.24
E2		10	4/8/95			48	-	nd	nd	nd	nd
E3		10	4/8/95			nd	-	.37	1.40	--	42
E4		5	4/8/95			968	-	4.82	6.56	--	968
E5		5	4/8/95			462	-	.50	1.64	1.58	462
E6		4	4/8/95			nd	-	.31	.48	nd	nd
E7		5	4/8/95			nd	-	nd	nd	nd	nd
E8		5	4/8/95			nd	-	nd	nd	nd	nd

* Indicates water sample, in ppb

Note: Field Test Using a Gastec GT 202 PID meter

Industrial Safety and Training

Winlock School District #232, Bus Garage

RESULTS OF FIELD SCREENING AND CHEMICAL ANALYSIS SAMPLING OF SOILS

Sample ID #	Sample Location	Sample Depth	Date Analyzed	Field Screening results		EPA 8020					
				Headspace vapors (ppm)	Sheen	WTPH-G (mg/kg)	WTPH-D mg/kg)	B	T	E	X
E-9	SEE DIAGRAM		4/8/95			nd	-	.07	.20	nd	.06
E-10			4/8/95			nd	-	.20	.09	nd	nd
E-11			4/8/95			nd	-	nd	nd	nd	nd
E-12			4/8/95			1500	-	3.35	44.8	--	145
RW-1			4/8/95			nd	-	nd	nd	nd	nd
RW-2			4/8/95			397	-	13	59	--	52
RW-2B			4/8/95			nd	-	nd	nd	nd	nd
R-1			5/8/95			18	-	.07	nd	nd	.19
R-2			5/8/95			nd	-	nd	nd	nd	.20
R-3			5/8/95			23	-	.18	.07	2.32	2.06
R-4			5/8/95			16	-	.13	.07	nd	1.33
R-5			5/8/95			30	-	.13	.08	nd	1.03
R6			5/8/95			12	-	nd	nd	nd	.17

* Indicates water sample, in ppb

Note: Field Test Using a Gastec GT 202 PID meter

Industrial Safety and Training

Winlock School District #232, Bus Garage

RESULTS OF FIELD SCREENING AND CHEMICAL ANALYSIS SAMPLING OF SOILS

Sample ID #	Sample Location	Sample Depth	Date Analyzed	Field Screening results		EPA 8020					
				Headspace vapors (ppm)	Sheen	WTPH-G (mg/kg)	WTPH-D mg/kg)	B	T	E	X
R-7	SEE DIAGRAM		5/8/95			19	-	.05	.13	nd	.51
R-8			5/8/95			43	-	.25	.94	.66	4.61
R-9			5/8/95			13	-	.14	.16	nd	.43
R-10			5/8/95			nd	-	nd	.06	nd	.15

* Indicates water sample, in ppb

Note: Field Test Using a Gastec GT 202 PID meter

Industrial Safety and Training

APPENDIX C

Photographs

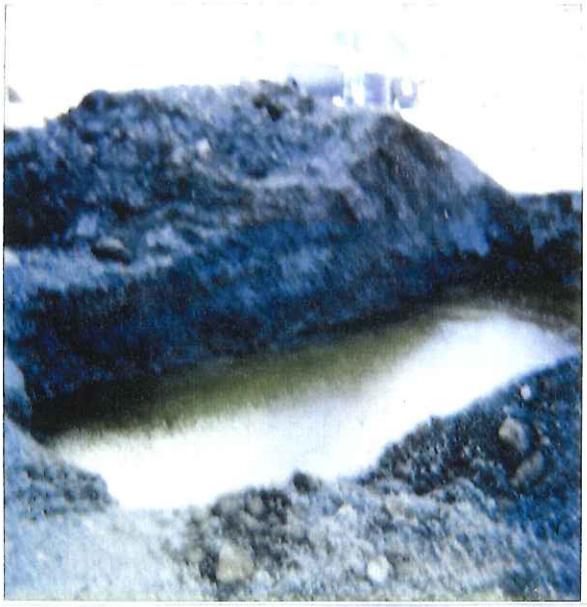
Winlock School Bus Garage Photos

Tank #1 (gasoline leaker)

Tank #2 (Diesel)

Tank #3 (empty/abandoned)

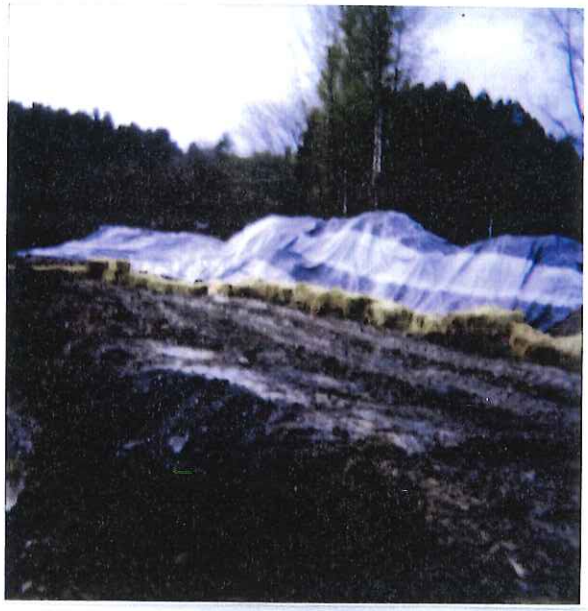
Winlock School Bus Garage Photos



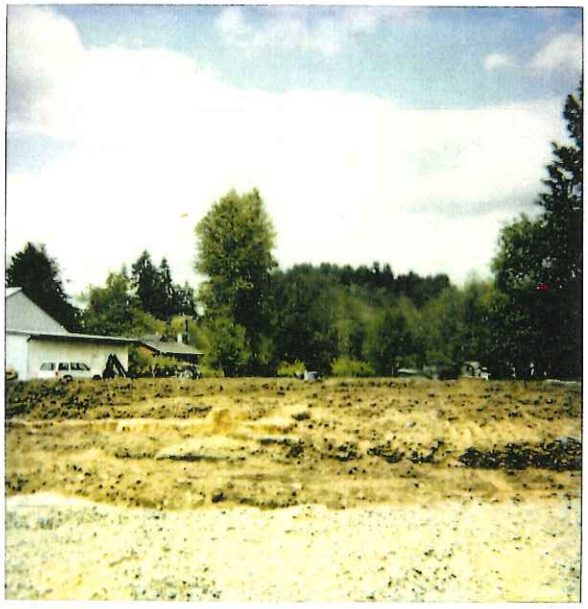
Tank #1 pit/water table

Support beams/Excavation photos

Winlock School Bus Garage Photos



Lined/bermed/covered PCS



Treated Soil photos

APPENDIX D

MTCA Method A Cleanup Standards

MTCA Method A Cleanup Standards

	Cleanup Levels	
Hazardous Substance	**Ground Water**	**Soil**
Benzene	5 ppb[1]	0.5 ppm
Ethylbenzene	30 ppb	20.0 ppm
Toluene	40 ppb	40.0 ppm
Xylene	20 ppb	20.0 ppm
Total Petroleum Hydrocarbons (TPH):		
Gasoline TPH	1000 ppb	100.0 ppm
Diesel & Other TPH	1000 ppb	200.0 ppm
Total Lead	5 ppb	250.0 ppm

[1] If the amount of benzene in ground water is above 1 ppb, the owner or operator must submit a state remedial investigation/feasibility report (WAC 173-340-450(5)(a)(i).

APPENDIX E

QA/QC
Laboratory Analyses
Chain of Custody

QA/QC FOR ANALYTICAL METHODS

GENERAL

The TEG Northwest Laboratory quality assurance and quality control (QA/QC) procedures are conducted following the guidelines and objectives which meet or exceed certification/accreditation requirements of California DOHS, Washington DOE, and Oregon DEQ. The Quality Control Program is a consistent set of procedures which assures data quality through the use of appropriate blanks, replicate analyses, surrogate spikes, and matrix spikes, and with the use of reference standards that meet or exceed EPA standards.

When analyses are taking place on-site with the mobile lab, the need for Field Blanks or Travel/Trip Blanks is eliminated. If there is going to be a delay before sample preparation for analysis, the sample is stored at 4° C.

ANALYTICAL METHODS

TEG Northwest Labs use analytical methodologies which are in conformity with U. S. Environmental Protection Agency (EPA), Washington DOE, and Oregon DEQ methodologies. When necessary and appropriate due to the nature or composition of the sample, TEG may use variations of the methods which are consistent with recognized standards or variations used by the industry and government laboratories.

TPH-Gasoline, TPH-Diesel
(Gasoline and/or Diesel, Modified EPA 8015, WTPH-G and WTPH-D)

A blank and a calibration standard are run at the beginning of the day. The standard must be within 15% of the continuing calibration curve value. The standard is rerun at the end of the day. All samples are prepared with a surrogate spike, and the recovery must be between 65% and 135%. A duplicate sample is run at a rate of 1 per 10 samples (or a matrix spike sample is prepared and analyzed). At least 1 method blank is run per 10 samples analyzed.

Purgeable Volatile Aromatics
(BTEX, EPA 602/8020)

A blank and a calibration standard are run at the beginning of the day. The standard must be within 15% of the continuing calibration curve value. The standard is rerun at the end of the day if more than 10 samples have been run. All samples are prepared with a surrogate spike, and the recovery must be between 65% and 135%. At least 1 method blank is run per day.

Purgeable Volatile Halocarbons
(Chlorinated Hydrocarbons, EPA 601/8010,8021)

A blank and a calibration standard are run at the beginning of the day. The standard must be within 15% of the continuing calibration curve value. The standard is rerun at the end of the day if more than 10 samples have been run. All samples are prepared with a surrogate spike, and the recovery must be between 65% and 135%. At least 1 method blank is run per day.

TPH-Heavy Fuel Hydrocarbons
(EPA 418.1, WTPH-418.1)

Calibration plot values must produce a best fit line, with known values deviating from the plot by less than 10%. Prior to sample run, a blank, a calibration standard, and a method blank are run. One method blank per 10 samples is prepared. A sample duplicate is prepared for each 10 samples to be run per day.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC.

7110 38th Drive SE
Lacey, Washington 98503

Mobile Environmental Laboratories
Environmental Sampling Services

Telephone: 360-459-4670
Fax: 360-459-3432

March 17, 1995

Cathy Frey
Industrial Safety & Training
202 Lybarger Road NE
Olympia, WA 98513

Dear Ms. Frey:

Please find enclosed the data report for the analyses conducted off-site March 16th for samples from the Winlock Project, Winlock, Washington. There were 3 samples analyzed for Gasoline by WTPH-G and BTEX by EPA Method 8020, 1 for Diesel by WTPH-D, 1 for Hydrocarbon Identification by WTPH-HCID, and 1 for Total Lead by EPA 7420.

The results of the analyses are summarized in the attached table. All soil values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. An invoice for this analytical work is also enclosed.

TEG Northwest appreciates the opportunity to have provided analytical services to C J Environmental for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A. Korosec

Michael A. Korosec
(President)

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

WINLOCK PROJECT
Winlock, Washington
Industrial Safety & Training

Gasoline (WTPH-G) & BTEX (EPA 8020) Analyses for Soils

Sample Number	Date Analyzed	Benzene mg/kg	Toluene mg/kg	Eth Benz mg/kg	Xylene mg/kg	Gasoline mg/kg	Recovery (%)
Meth. Blank	03/16/95	nd	nd	nd	nd	nd	99
GS-1	03/16/95	2.45	9.81	2.14	12.9	116	98
GS-1 Dup	03/16/95	2.67	11.2	2.45	14.9	119	97
Detection Limits		0.05	0.05	0.05	0.05	10	

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interferences prevent determination.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

WINLOCK PROJECT
Winlock, Washington
Industrial Safety & Training

Diesel Range Hydrocarbons in Soil by WTPH-D

Sample Number	Date	Recovery (%)	Diesel mg/kg
Meth. Blank	03/16/95	104	nd
DS-2	03/16/95	120	nd
Method Detection Limit			10

"nd" Indicates not detected at the listed detection limit.
"int" Indicates that interfering peaks prevent determination.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

WINLOCK PROJECT
Winlock, Washington
Industrial Safety & Training

Hydrocarbon Identification by WTPH-HCID for Soils

Sample Number	Date	Recovery %	Gasoline mg/kg	Diesel mg/kg	Heavy Oil mg/kg
Meth. Blank	03/16/95	104	nd	nd	nd
US-3	03/16/95	int	D	nd	nd
Method Detection Limits			20	50	100

"nd" Indicates not detected at the listed detection limit.
"D" Indicates detected above the listed detection limit.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC

WINLOCK PROJECT
Winlock, Washington
Industrial Safety & Training

Total Lead Analyses (EPA 7420) for Soils

SAMPLE Number	Date Analyzed	Lead (mg/kg)
Meth. Blank	03/17/94	nd
US-3	03/17/94	23

Method Detection Limit = 5.0 mg/kg
"nd" Indicates Not Detected at the listed MDL.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

WINLOCK PROJECT
Winlock, Washington
Industrial Safety & Training

Gasoline (WTPH-G) & BTEX (EPA 8020) Analyses for Water

Sample Number	Date Analyzed	Benzene ug/l	Toluene ug/l	Eth Benz ug/l	Xylene ug/l	Gasoline ug/l	Recovery (%)
Meth. Blank	03/16/95	nd	nd	nd	nd	nd	99
GWG-1	03/16/95	3260	7830	790	4480	39500	83
GWU-3	03/16/95	15100	21800	1180	6950	78200	94
Detection Limits		1	1	1	1	100	

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interferences prevent determination.

TRANSGLOBAL ENVIRONMENTAL GEOCHEMISTRY,

CHAIN-OF-CUSTODY RECORD

P.O. #: 1318

CLIENT: Industrial Safety & Training

ADDRESS: 202 N Cybarger Olympia 98506

PHONE: 357.3516 FAX:

CLIENT PROJECT #: WINLOCK PROJECT MANAGER: Cathy Frey

DATE: PAGE OF

TEG PROJECT #:

LOCATION:

COLLECTOR: Cathy Frey DATE OF COLLECTION: 9/15/95

Sample Number	Depth	Time	Sample Type	Container Type	VOA 601/8010	VOA 602/8020	VOA 624/8240	Semi Vol 625/8270	TPH 418.1	TPH 8015 (gasoline)	TPH 8015 (diesel)	PNA 610/8100	PEST/PCBs 8080	HEX CHROME	ORGANIC LEAD	TOTAL LEAD	pH	ASBESTOS	HCID	FIELD NOTES	Total Number Of Containers	Laboratory Note Number
GS1	3'	3:30pm	Soil	Glass jar	X				X													
DS2	3'	3:40pm	Soil	↓					X	X												
US3	3'	4:00pm	Soil	↓											X			X				
GWG1	3'	5:10pm	H2O	Glass vial	X				X													
GWL3	3'	4:30pm	H2O	Glass vial																Run HCID on US3 based on result		

RELINQUISHED BY: (Signature) DATE/TIME 9/15/95 10:40 RECEIVED BY: (Signature) DATE/TIME 9/16/95 1040

RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature) DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☐ TEG DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT

TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC.

7110 38th Drive SE
Lacey, Washington 98503

Mobile Environmental Laboratories
Environmental Sampling Services

Telephone: 360-459-4670
Fax: 360-459-3432

April 5, 1995

Cathy Frey
Industrial Safety & Training
202 N. Lybarger
Olympia, WA 98506

Dear Ms. Frey:

Please find enclosed the data report for analyses conducted off-site April 5, 1995, for a water sample from the Winlock Project, Winlock, Washington. There was one water sample analyzed for Gasoline by WTPH-G and BTEX by EPA Method 8020.

The results of this analyses are summarized in the attached table. An invoice for the analytical work is also enclosed.

TEG Northwest appreciates the opportunity to have provided analytical services to Industrial Safety & Training for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A Korosec

Michael A. Korosec
(President)

t1/industri.ltr

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

WINLOCK PROJECT
Winlock, Washington
Industrial Safety & Training

Gasoline (WTPH-G), & BTEX (EPA 8020) Analyses for Water

Sample Number	Date Analyzed	Benzene ug/l	Toluene ug/l	Eth Benz ug/l	Xylene ug/l	Gasoline ug/l	Recovery (%)
Meth. Blank	04/05/95	nd	nd	nd	nd	nd	110
FW-1	04/05/95	135	262	27	204	1600	86
FW-1 Dup	04/05/95	136	263	27	207	1640	97
Detection Limits		1	1	1	1	100	

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interferences prevent determination.

TRANSGLOBAL ENVIRONMENTAL GEOCHEMISTRY,

CHAIN-OF-CUSTODY RECORD

P.O. #: _____

CLIENT: Industrial Salvage Training
ADDRESS: 202 N Lytle Creek Olney 78506
PHONE: 360.357 3566 FAX: 360-740.0818
CLIENT PROJECT #: Winlock PROJECT MANAGER: Cathy Frey

DATE: 4-4-95 PAGE 1 OF 1
TEG PROJECT #: _____
LOCATION: _____
COLLECTOR: Cathy Frey DATE OF COLLECTION: _____

Sample Number	Depth	Time	Sample Type	Container Type	VOA 601/8010	VOA 602/8020	VOA 624/8240	Semi Vol 625/8270	TPH 418.1	TPH 8015 (gasoline)	TPH 8015 (diesel)	TPH 8015 (g & d)	PNA 610/8100	PEST/PCBs 8080	HEX CHROME	ORGANIC LEAD	TOTAL LEAD	pH	ASBESTOS	FIELD NOTES	Total Number Of Containers	Laboratory Note Number
FW1		3:00pm	H2O	Glass vial	X				X											filtered water		

RELINQUISHED BY: (Signature) DATE/TIME 4-4-95 4:15pm RECEIVED BY: (Signature) DATE/TIME 4/4/95 1600
RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature) DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☐ TEG DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

WINLOCK PROJECT
Winlock, Washington
Industrial Safety & Training

Gasoline (WTPH-G), & BTEX (EPA 8020) Analyses for Water

Sample Number	Date Analyzed	Benzene ug/l	Toluene ug/l	Eth Benz ug/l	Xylene ug/l	Gasoline ug/l	Recovery (%)
Meth. Blank	04/08/95	nd	nd	nd	nd	nd	96
FW-2	04/08/95	nd	nd	nd	nd	nd	91
Detection Limits		1	1	1	1	100	

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interferences prevent determination.

teg

TRANSGLOBAL ENVIRONMENTAL GEOCHEMISTRY, INC.

CHAIN-OF-CUSTODY RECORD

CLIENT: Industrial Safety & Training

ADDRESS:

PHONE: FAX:

CLIENT PROJECT #: Winlock PROJECT MANAGER: Cathy Frey

DATE: 4/8/95 PAGE ___ OF ___

TEG PROJECT #:

LOCATION: Winlock, Wa

COLLECTOR: Cathy Frey DATE OF COLLECTION: 4/6/95

Boring or Well Number	Sample Number	Depth	Time	Sample Type	Container Type	VOA 601/8010	VOA 602/8020	VOA 624/8240	Semi Vol 625/8270	TPH 418.1	TPH 8015 (gasoline)	TPH 8015 (diesel)	TPH 8015 (g & d)	PNA 610/8100	PEST/PCBs 8080	HEX CHROME	ORGANIC LEAD	TOTAL LEAD	pH	ASBESTOS	FIELD NOTES:	Total Number Of Containers	Laboratory Note Number
FW	2	-	1000	H_2O	40ml vial		X			X													

RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)

4/8/95 915 Eric Nam

RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)

RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)

LABORATORY NOTES:

WHITE COPY - Original (Accompanies Samples) YELLOW COPY - Collector PINK COPY - Project Manager

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC.

7110 38th Drive SE
Lacey, Washington 98503

Mobile Environmental Laboratories
Environmental Sampling Services

Telephone: **360-459-4670**
Fax: **360-459-3432**

April 6, 1995

Cathy Frey
Industrial Safety & Training
202 N. Lybarger
Olympia, WA 98506

Dear Ms. Frey:

Please find enclosed the data report for analyses conducted off-site April 6, 1995, for a soil sample from the Winlock Project, Winlock, Washington. There was one soil sample analyzed for Gasoline by WTPH-G and BTEX by EPA Method 8020.

The results of the analyses are summarized in the attached table. All soil values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. An invoice for this analytical work is also enclosed.

TEG Northwest appreciates the opportunity to have provided analytical services to Industrial Safety & Training for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A Korosec.

Michael A. Korosec
(President)

tl/industri.ltr

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

WINLOCK PROJECT
Winlock, Washington
Industrial Safety & Training

Gasoline (WTPH-G) & BTEX (EPA 8020) Analyses for Soils

Sample Number	Date Analyzed	Benzene mg/kg	Toluene mg/kg	Eth Benz mg/kg	Xylene mg/kg	Gasoline mg/kg	Recovery (%)
Meth. Blank	04/06/95	nd	nd	nd	nd	nd	104
TP-1	04/06/95	0.05	0.09	nd	0.05	nd	103
Detection Limits		0.05	0.05	0.05	0.05	10	

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interferences prevent determination.

TRANSGLOBAL ENVIRONMENTAL GEOCHEMISTRY,

CHAIN-OF-CUSTODY RECORD

P.O. #: _____

CLIENT: Industrial Safety's Training
ADDRESS: 207 N Lyndhurst
PHONE: 357.3566 / MESA FAX: _____
CLIENT PROJECT #: Whitlock PROJECT MANAGER: Cathy Frey

DATE: 4-6-95 PAGE 1 OF 1
TEG PROJECT #: NW950406-1
LOCATION: _____
COLLECTOR: Cathy Frey DATE OF COLLECTION: 4/5/95

Sample Number	Depth	Time	Sample Type	Container Type	VOA 601/8010	VOA 602/8020	VOA 624/8240	Semi Vol 625/8270	TPH 418.1	TPH 8015 (gasoline)	TPH 8015 (diesel)	TPH 8015 (g & d)	PNA 610/8100	PEST/PCBs 8080	HEX CHROME	ORGANIC LEAD	TOTAL LEAD	pH	ASBESTOS						FIELD NOTES	Total Number Of Containers	Laboratory Note Number
TP1	4'	9:30 am	Soil	Glass jar	X				X																		
TP2	4'	9:40 am	"	"																					Hold		
TP3	4'	9:50 am	"	"																					Hold		

RELINQUISHED BY: (Signature) Cathy Frey DATE/TIME 4-6 10:00 am RECEIVED BY: (Signature) [illegible] DATE/TIME 4-6-95 [illegible]
RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature) DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS
☐ TEG DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	3
CHAIN OF CUSTODY SEALS Y/N/NA	5
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	4
NOTES:	

LABORATORY NOTES:

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC.

7110 38th Drive SE
Lacey, Washington 98503

Mobile Environmental Laboratories
Environmental Sampling Services

Telephone: **360-459-4670**
Fax: **360-459-3432**

April 11, 1995

Cathy Frey
Industrial Safety & Training
202 N. Lybarger
Olympia, WA 98506

Dear Ms. Frey:

Please find enclosed the data reports for on-site analysis of soil and water samples April 8, 1995, from the Winlock Project, Winlock, Washington. The soils and waters were analyzed for Gasoline by WTPH-G and BTEX by EPA Method 8020.

The results of the analyses are summarized in the attached table. All soil values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. An invoice for this analytical work is also enclosed.

TEG Northwest appreciates the opportunity to have provided analytical services to Industrial Safety & Training for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A Korosec

Michael A. Korosec
(President)

t1/industri.ltr

WINLOCK PROJECT
Winlock, Washington
Industrial Safety & Training

Gasoline (WTPH-G) & BTEX (EPA 8020) Analyses for Soils

Sample Number	Date Analyzed	Benzene mg/kg	Toluene mg/kg	Eth Benz mg/kg	Xylene mg/kg	Gasoline mg/kg	Recovery (%)
Meth. Blank	04/08/95	nd	nd	nd	nd	nd	96
E-1	04/08/95	0.47	2.14	--	4.25	48	107
E-2	04/08/95	nd	nd	nd	nd	nd	97
E-3	04/08/95	0.37	1.40	--	2.19	42	91
E-4	04/08/95	4.82	6.56	--	15.0	968	int
E-5	04/08/95	0.50	1.64	1.58	1.10	462	int
E-6	04/08/95	0.31	0.48	nd	0.16	nd	107
E-7	04/08/95	nd	nd	nd	nd	nd	100
E-8	04/08/95	nd	nd	nd	nd	nd	103
E-9	04/08/95	0.07	0.20	nd	0.06	nd	106
E-9 Dup	04/08/95	0.07	0.20	nd	0.06	nd	104
E-10	04/08/95	0.06	0.09	nd	nd	nd	120
E-11	04/08/95	nd	nd	nd	nd	nd	102
E-12	04/08/95	3.35	44.8	--	145	1500	110
Detection Limits		0.05	0.05	0.05	0.05	10	

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interferences prevent determination.
"--" Indicates that xylene interference prevents ethylbenzene quantification

WINLOCK PROJECT
Winlock, Washington
Industrial Safety & Training

Gasoline (WTPH-G), & BTEX (EPA 8020) Analyses for Water

Sample Number	Date Analyzed	Benzene ug/l	Toluene ug/l	Eth Benz ug/l	Xylene ug/l	Gasoline ug/l	Recovery (%)
Meth. Blank	04/08/95	nd	nd	nd	nd	nd	96
RW-1	04/08/95	nd	nd	nd	nd	nd	94
RW-2	04/08/95	13	59	--	52	397	95
RW-2B	04/08/95	nd	nd	nd	nd	nd	99
RW-2B Dup	04/08/95	nd	nd	nd	nd	nd	99
Detection Limits		1	1	1	1	100	

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interferences prevent determination.
"--" Indicates that xylene interference prevents ethylbenzene quantification

teg

TRANSGLOBAL ENVIRONMENTAL GEOCHEMISTRY,

CHAIN-OF-CUSTODY RECORD

P.O. #: _____

CLIENT: Municipal S & T, Inc.
ADDRESS: 202 N Lybarger
PHONE: 357.3561 FAX: _____
CLIENT PROJECT #: Winlock PROJECT MANAGER: Cathy Frey

DATE: 4-5-95 PAGE _____ OF _____
TEG PROJECT #: _____
LOCATION: Winlock, Wa
COLLECTOR: Cathy Frey DATE OF COLLECTION: 4-5-95

Sample Number	Depth	Time	Sample Type	Container Type	VOA 601/8010	VOA 602/8020	VOA 624/8240	Semi Vol 625/8270	TPH 418.1	TPH 8015 (gasoline)	TPH 8015 (diesel)	PNA 610/8100	PEST/PCBs 8080	HEX CHROME	ORGANIC LEAD	TOTAL LEAD	pH	ASBESTOS	FIELD NOTES	Total Number Of Containers	Laboratory Note Number
E1	11'	9:20	Soil	6 oz jar	X					X									lab on site		
E2	10'	9:30			X					X											
E3	10'	9:45			X					X											
E4	5'	10:00			X					X											
E5	5'	10:45			X					X											
E6	4'	11:30			X					X											
E7	5'	12:20																			
E8	5'	12:30																			
E9	5'	11:30			X					X											
E10	4½'	11:45			X					X											
E11	5'	11:00			X					X											
E12	5'	10:00			X					X											
~~E13~~					~~X~~					~~X~~											
RW1		11:00	H_2O	40 ml vial	X					X											
RW2					X					X											
RW2b		11:30			X					X											

RELINQUISHED BY: (Signature) DATE/TIME 4-8-95 RECEIVED BY: (Signature) DATE/TIME 4/8/95
RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature) DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☐ TEG DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC.

7110 38th Drive SE
Lacey, Washington 98503

Mobile Environmental Laboratories
Environmental Sampling Services

Telephone: 360-459-4670
Fax: 360-459-3432

May 11, 1995

Cathy Frey
Industrial Safety & Training
202 N. Lybarger
Olympia, WA 98506

Dear Ms. Frey:

Please find enclosed the data report for analysis conducted off-site May 8, 1995, for soil samples from the Winlock Project in Winlock, Washington. The soils were analyzed for Gasoline by WTPH-G and BTEX by EPA Method 8020.

The results of the analyses are summarized in the attached table. All soil values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. An invoice for this analytical work is also enclosed.

TEG Northwest appreciates the opportunity to have provided analytical services to Industrial Safety & Training for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A. Korosec

Michael A. Korosec
President

tl/industri.ltr

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

WINLOCK PROJECT
Winlock, Washington
Industrial Safety and Training

Gasoline (WTPH-G) & BTEX (EPA 8020) Analyses for Soils

Sample Number	Date Analyzed	Benzene mg/kg	Toluene mg/kg	Eth Benz mg/kg	Xylene mg/kg	Gasoline mg/kg	Recovery (%)
Meth. Blank	05/08/95	nd	nd	nd	nd	nd	92
R-1	05/08/95	0.07	nd	nd	0.19	18	101
R-1 Dup.	05/08/95	--	--	--	--	24	92
R-2	05/08/95	nd	nd	nd	0.2	nd	98
R-3	05/08/95	0.18	0.07	0.32	2.06	23	96
R-4	05/08/95	0.13	0.07	nd	1.33	16	90
R-5	05/08/95	0.13	0.08	0.06	1.03	30	97
R-6	05/08/95	nd	nd	nd	0.17	12	112
R-7	05/08/95	0.05	0.13	nd	0.51	19	94
R-8	05/08/95	0.25	0.94	0.66	4.61	43	92
R-8 Dup.	05/08/95	0.31	1.01	0.63	4.73	78	95
R-9	05/08/95	0.14	0.16	nd	0.43	13	97
R-10	05/08/95	nd	0.06	nd	0.15	nd	89
Detection Limits		0.05	0.05	0.05	0.05	10	

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interferences prevent determination.

TRANSGLOBAL ENVIRONMENTAL GEOCHEMISTRY,

CHAIN-OF-CUSTODY RECORD

P.O. #: _____

CLIENT: Cathy Frey / Industrial S/T
ADDRESS: 202 N. Lybarger St.
PHONE: 357. 3516 FAX: _____
CLIENT PROJECT #: Winlock PROJECT MANAGER: Cathy Frey

DATE: 5-8-95 PAGE 1 OF 1
TEG PROJECT #: WINLOCK II
LOCATION: WINLOCK
COLLECTOR: Cathy Frey DATE OF COLLECTION: 5/8/95

Sample Number	Depth	Time	Sample Type	Container Type	VOA 601/8010	VOA 602/8020	VOA 624/8240	Semi Vol 625/8270	TPH 418.1	TPH 8015 (gasoline)	TPH 8015 (diesel)	TPH 8015 (g & d)	PNA 610/8100	PEST/PCBs 8080	HEX CHROME	ORGANIC LEAD	TOTAL LEAD	pH	ASBESTOS	FIELD NOTES	Total Number Of Containers	Laboratory Note Number
B1		1:00pm	Soil	Glass jar	X				X												1	
B2		1:10pm	"	↓	X				X												1	
B3		1:15pm	"		X				X												1	
B4		1:25pm	"		X				X												1	
B5		1:35pm	"		X				X												1	
B6		1:45pm	"		X				X												1	
B7		1:55pm	"		X				X												1	
B8		2:05pm	"		X				X												1	
B9		2:10pm	"		X				X												1	
B10		2:20pm	"		X				X												1	

RELINQUISHED BY: (Signature) DATE/TIME 5/9/95 RECEIVED BY: (Signature) DATE/TIME 3:37pm 5-8-95

RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature) DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☐ TEG DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	10
CHAIN OF CUSTODY SEALS Y/N/NA	-
SEALS INTACT? Y/N/NA	-
RECEIVED GOOD COND./COLD	-
NOTES:	

LABORATORY NOTES:
Call Cathy when done, Will Stop in.

APPENDIX F

Department of Ecology Checklists

WASHINGTON STATE DEPARTMENT OF ECOLOGY

UNDERGROUND STORAGE TANK
30 DAY NOTICE

See back of form for instructions
Please ☑ the appropriate box SW

☐ Intent to Install ☑ Intent to Close ☐ Both

KE

For Office Use Only
Owner # U0009312
Site # 100997

SITE INFORMATION:

Site ID Number (on invoice or available from Ecology if the tank is registered): 100997
Site/Business Name: Winlock School Bus Garage
Site Address: King Rd. & Byham Rd. (Street)
Winlock (City) WA (State) 98596 (ZIP-Code)
Owner/Operator Telephone: (360) 785.3582

TANK INFORMATION:

TANKS TO BE CLOSED

This section to be filled out ONLY if tanks are being removed

Tank ID	Projected Closure Date	Tank Capacity	Substance Stored	Date tank last used	Is there product in the tank? (yes/no)	If no, date tank was pumped
1	3/15/95	1,000	Gasoline	3/10/95	no	3/10/95
2	3/15/95	1,000	Diesel	3/10/95	no	3/10/95

RECEIVED
MAR 16 1995
ECOLOGY

TANKS TO BE INSTALLED

This section to be filled out ONLY if tanks are being installed

Tank ID	Approx. Install Date

TANK INSTALLATION TO BE PERFORMED BY (if known):

This section to be filled out ONLY if tanks are being installed

Service Provider: _____ Contact Name: _____
Telephone: (___) _____
Address: _____ (Street) _____ (P.O. Box)
_____ (City) _____ (State) _____ (ZIP-Code)

TANK PERMANENT CLOSURE TO BE PERFORMED BY (if known):

This section to be filled out ONLY if tanks are being removed

Service Provider: North Fork Construction
Contact Name: John Trodahl
Telephone: 360 262.9825
Address: 103 N. Fork Rd. (Street)
Chehalis (City) WA (State) 98532 (P.O. Box / ZIP-Code)

This form will be returned to this address
UST OWNER/ OPERATOR: Cathy Frey for School Bus Garage
MAILING ADDRESS: 202 N Lybarger (Street)
Olympia (City) WA (State) 98506 (ZIP-Code)

Once validated by Ecology, this form serves as your temporary permit for the tanks listed above.

Please type or print information

ECY 020-33

WASHINGTON STATE DEPARTMENT OF ECOLOGY

UNDERGROUND STORAGE TANK TEMPORARY/PERMANENT CLOSURE and SITE ASSESSMENT NOTICE

See back of form for instructions
Please ☑ the appropriate box(es)
Please type or print information

For Office Use Only
Owner #
Site #

☐ Temporary Tank Closure ☑ Permanent Tank Closure ☐ Change-In-Service ☑ Site Assessment/ Site Check

SITE INFORMATION:

Site ID Number (on invoice or available from Ecology if the tanks are registered): 100997
Site/Business Name: Winlock School Bus Garage
Site Address: King Rd & Dexter Ave (Street) Telephone: (360) 785.3582
Winlock (City) WA (State) 98596 (ZIP-Code)

TANK INFORMATION:

Tank ID	Closure Date	Tank Capacity	Substance Stored
1	3/15/95	1,000 gal	Gasoline
2	3/15/95	1,000 gal	Diesel
3	3/15/95	1,000 gal	*Empty

CONTAMINATION PRESENT AT THE TIME OF CLOSURE

☑ Yes ☐ No ☐ Unknown

Check unknown if no obvious contamination was observed and sample results have not yet been received from analytical lab.

UST SYSTEM OWNER/OPERATOR:

UST Owner/Operator: Winlock School Bus Garage
Owners Signature: Larry Brent, Supt Telephone: (306) 785.3582
Address: 311 NW 1st St (Street)
Winlock (City) WA (State) 98596 (P.O. Box) 306.785.3582 (ZIP-Code)

TANK CLOSURE/CHANGE-IN-SERVICE PERFORMED BY:

Service Provider: North Fork Construction License Number:
Licensed Supervisor: John Trodahl Decommissioning License Number: W002008
Supervisors Signature:
Address: 103 N Fork Rd (Street)
Chehalis (City) WA (State) 98532 (P.O. Box) (ZIP-Code)
Telephone: (360) 262.9825

SITE CHECK/SITE ASSESSMENT CONDUCTED BY:

Name of Registered Site Assessor: Cathy Frey ASI ID 32-115-320004459
Telephone: (360) 357.3516
Address: 202 N Lybarger (Street)
Olympia (City) WA (State) 98506 (P.O. Box) (ZIP-Code)

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

PO Box 47775 • Olympia, Washington 98504-7775 • (206) 407-6300

March 16, 1995

Mr. Larry Hirst
Winlock School District #232
311 NW Fir Street
Winlock, WA 98596

Dear Mr. Hirst:

Re: Requirements for Reporting Environmental Conditions at LUST Contaminated Sites

The Department of Ecology (Ecology) has received a report that petroleum contamination as a result of a failure in an underground storage tank (UST) system has been discovered at the following location: School Bus Garage, King and Dexter, Winlock, Washington. The reporting of petroleum contamination from UST systems to Ecology is required by the Model Toxics Control Act cleanup regulation, Chapter 173-340 Washington Administrative Code (WAC).

The documents enclosed with this letter outline the remaining requirements with which you must comply in order to be in compliance with Chapter 173-340 WAC. Enclosed are a copy of WAC 173-340-450, Releases from Underground Storage Tanks, and a summary of reporting and sampling requirements for your use. The Toxics Cleanup Program also has a document entitled Guidance for Remediation of Releases from Underground Storage Tanks. The document goes into greater detail and is available upon request.

Please direct all reports and questions about this site to me. I may be reached at (360) 407-6245. The address is: Department of Ecology, P.O. Box 47775, Olympia, Washington 98504-7775.

Sincerely,

Patricia L. Martin

Patricia L. Martin
Southwest Regional Office
Toxics Cleanup Program

PLM:jr
Enclosures

cc: Kathy Fray
Steve Garrett, Lewis County Health District
Charles Haycock, Lewis County Fire Marshall
Jerry Strawn, SW WA Air Pollution Control Authority

WASHINGTON STATE DEPARTMENT OF ECOLOGY

WATER QUALITY/TCP LUST PERMIT COMMITTEE

MAY 1992

RECOMMENDATIONS TO JOINT MANAGEMENT TEAMS

The Committee recognizes two classes of water discharges from voluntary LUST site actions

1. Short-Term *(treated effluent discharge of 60 days or less)*
2. Long-Term *(treated effluent discharge greater than 60 days; also, any duration discharge where a permit is REQUESTED)*

The Committee included the following contaminants in this recommendation

- *Gasoline contamination only*
- *Mixture of gasoline and diesel contamination*
- *Diesel contamination only*

The Committee agreed on the following definitions supporting this recommendation

- Treatment to technical standards:

  Gasoline: *1.0 ppm WTPH-G (total petroleum hydrocarbons), pH (6-9), Benzene (5 ppb), Total lead (5 ppb), BETX (100 ppb)*
  Diesel: *10.0 ppm WTPH-D, pH (6-9)*
  Mixture: *run analytical methods for gasoline (WTPH-G, pH, benzene, lead, BETX) and diesel (WTPH-D, pH)*

- Discharge to Ground:

  Land application and infiltration trench or other land disposal systems (injection wells [e.g., dry wells] are prohibited)

- Point of Compliance:

  The point of compliance for technical standards will be at the end of the treatment process

- Total petroleum hydrocarbons analytical methods:

  April 1992 updates of Table II and Appendix L of the "Guidance for Remediation of Releases from USTs"

- Local jurisdiction approval:

  The approval given by a lawful representative of the publicly-owned treatment works (POTW) prior to effluent discharge into their collection system

STANDARDS THAT APPLY TO EACH CLASS

1. Short-Term Action

An interprogram policy decision will be made which recognizes voluntary cleanup actions will proceed; due to program resource constraints, Ecology will not require a waste discharge permit provided:

- Discharge to ground within site boundary

  Treatment to technical standards (gasoline, diesel, mixture)

- Discharge to POTW

  Treatment to technical standards and approval of local jurisdiction

- Discharge to surface waters

  Treatment to technical standards and 10:1 dilution in receiving water (gasoline and mixture)

  Treatment to technical standards (diesel only)

Advice to staff

- If questions arrive concerning monitoring frequency:

  Sample weekly during first 30 days, then once prior to shutdown

- SEPA:

  Project proponent is responsible to satisfy local officials and air authority, if required

- Model Toxics Control Act:

  Project proponent is responsible for satisfying the reporting requirements under WAC 173-340-450

2. Long-Term Action

- Require waste discharge permit application and SEPA checklist
- Engineering report approval by consultant (P.E.) certification
- Discharge to ground or POTW

  To ground: *Permit by rule when application indicates treatment to technical standards*

  To POTW: *Permit by rule when application indicates treatment to technical standards and approval of local jurisdiction*

- Discharge to surface waters

  A state or NPDES permit is required; the LUST "model permit" is designed for application to gasoline, diesel, or a mixture of both through options contained in the permit. The permit writer will have to analyze each application of the LUST permit to ensure the technology-based standards can be protective of receiving water quality within a regulatory "mixing zone," if appropriate.

CB:km(1/1)

APPENDIX G

Certification/Licenses

Washington Underground Storage Tank Supervisor License

This license is issued by the Director of the Department of Ecology in compliance with WAC 173-360 to:

FREY, CATHY

The licensee is authorized to supervise the following Underground Storage Tank Services in the State of Washington.

Number	Expires	License
W001732	31 DEC 95	DECOMMISSIONING

ECY 020-39 (9/93)

Signature Cathy Frey

Certificate of Completion

CATHY FREY

40 Hour Hazardous Waste Operations Course
OSHA 29 CFR 1910.120

F59
Certificate Number
9730793
Date

Zakariah Collins

Zakariah Collins
COLLINS ENVIRONMENTAL
CERTIFIED INSTRUCTOR

© GOES 461

Certificate
of Completion

Cathy Frey

Successfully completed the
8 Hour Refresher Course
as specified by
OSHA 29 CFR 1910.120
December 16, 1994
Olympia, Washington

Zakariah Collins !.H.

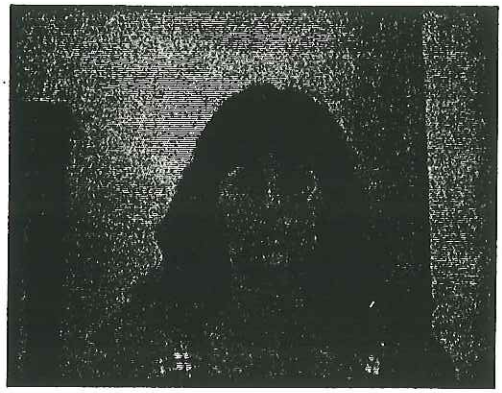
R 378
Certificate Number

Hazardous Materials
Emergency Response

COLLINS
Safety & Training

LITHO IN U.S.A.

INTERNATIONAL FIRE CODE INSTITUTE 4814



CATHY J. FREY
5052 B RACOON VALLEY RD
OLYMPIA, WA 98513

SSN: 531-64-9269
BDATE: 02/28/56
ASI ID: 32-US-32000459

EXAMINATION: **WA SITE ASSESS.**
EXAM DATE: 02/25/95

EXAMINATION RESULT: **PASS**

Congratulations! You have passed the Washington UST Site Assessment examination. This achievement attests to your knowledge of Washington site assessment practices and regulations in effect on this date.

Site Assessors in Washington are not required to register with the Department of Ecology. However, Site Assessors may be required to present this letter to the state inspectors as evidence of successful completion of this examination. Additional information on state requirements may be obtained from the Washington Department of Ecology, Toxics Cleanup Program UST Section, P.O. Box 47655, Olympia, WA 98504-7655 (phone 206-407-7206). Retesting every two years may be required by this agency.

Please notify IFCI of any change in your address. Thank you for your participation in the Washington UST Site Assessment examination.

IFCI Certification Section
5360 Workman Mill Road
Whittier, CA 90601-2298

(310)- 699-0124

DIAGNOSTIC REPORT ID: 32-US-32000459 **WA SITE ASSESS.** 02/25/95

EXAMINATION	PASSING SCORE	YOUR SCORE	RESULT
WA SITE ASSESS.	75	PASSED	**PASS**